

FIG. 1a is a block diagram of a system 100 for echo cancellation in a twisted wire pair.

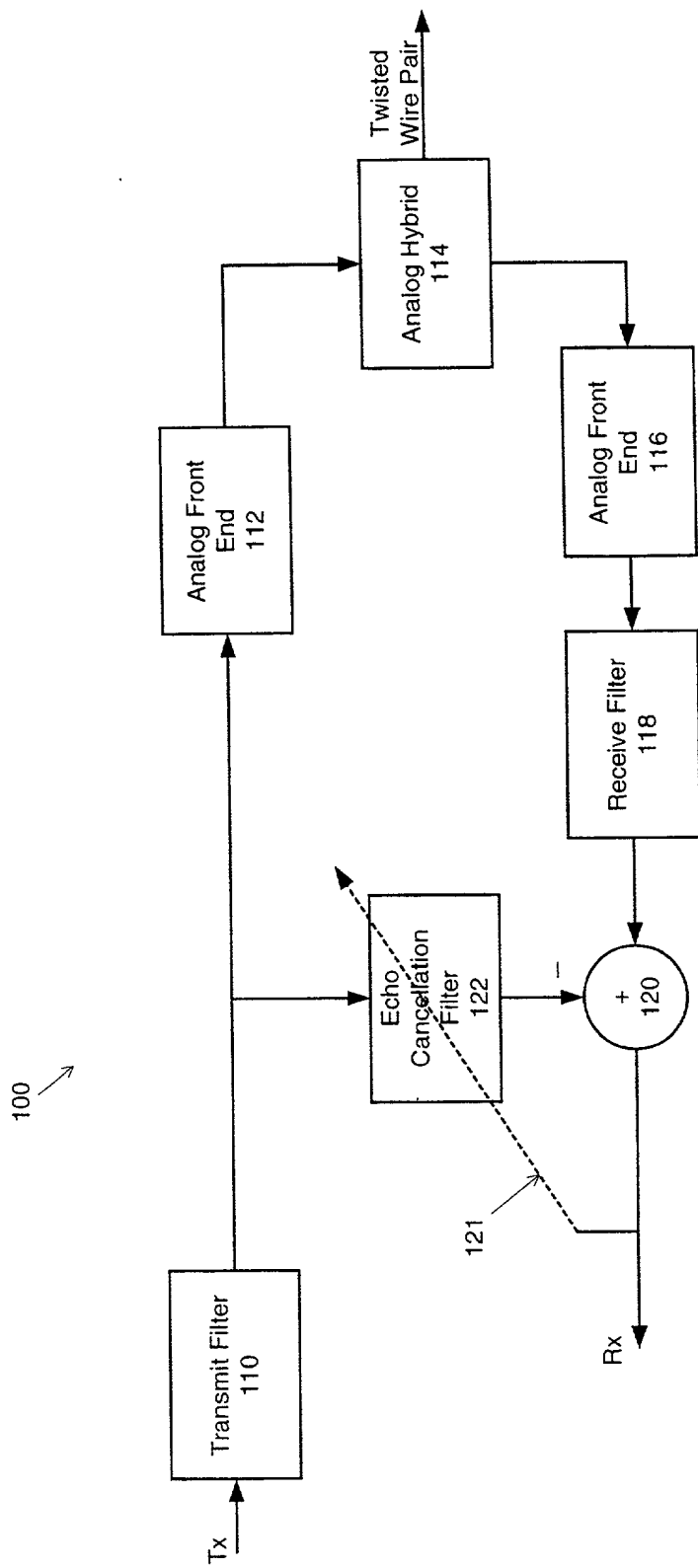
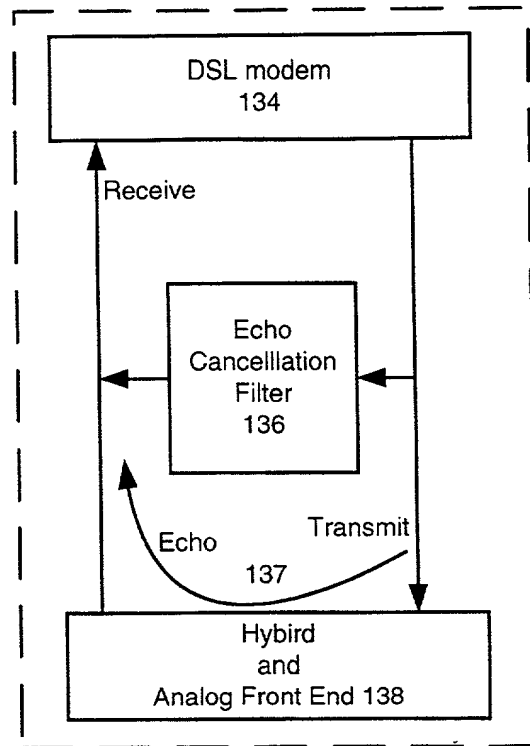
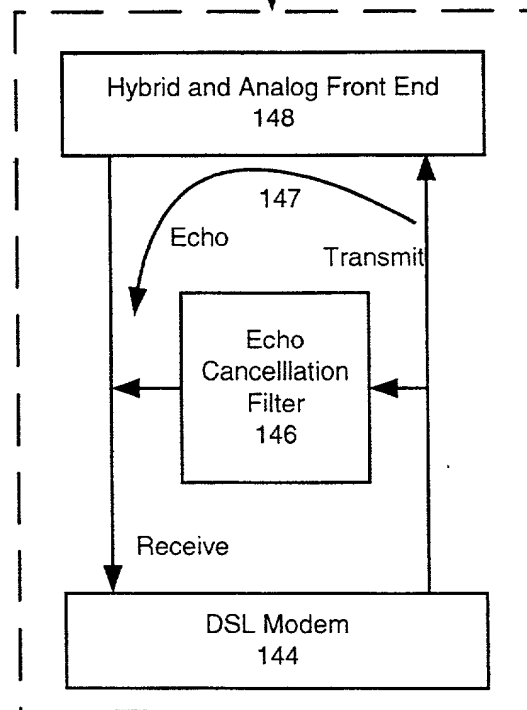


FIG. 1a



CO SIDE DSL  
Modem  
(DSLAM)  
132

Twisted  
Copper Pair  
140



CPE DSL  
Modem  
142

FIG. 1b

150

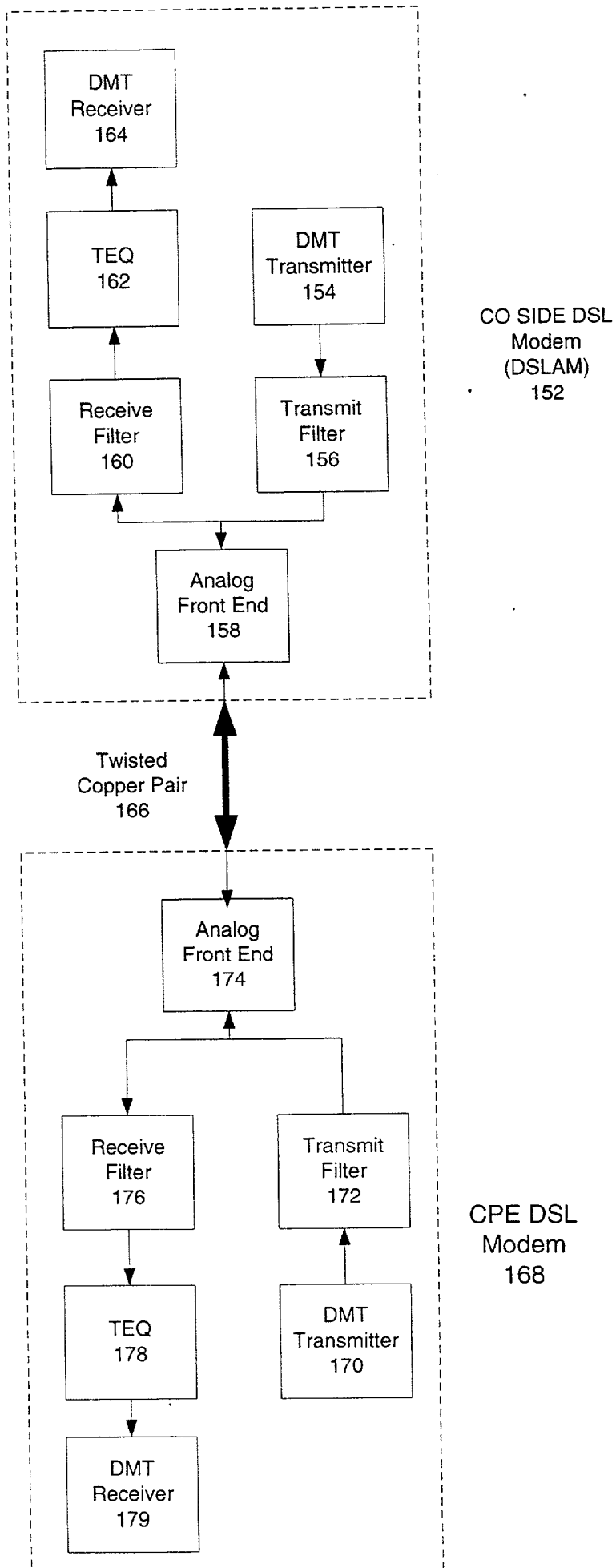


FIG. 1c

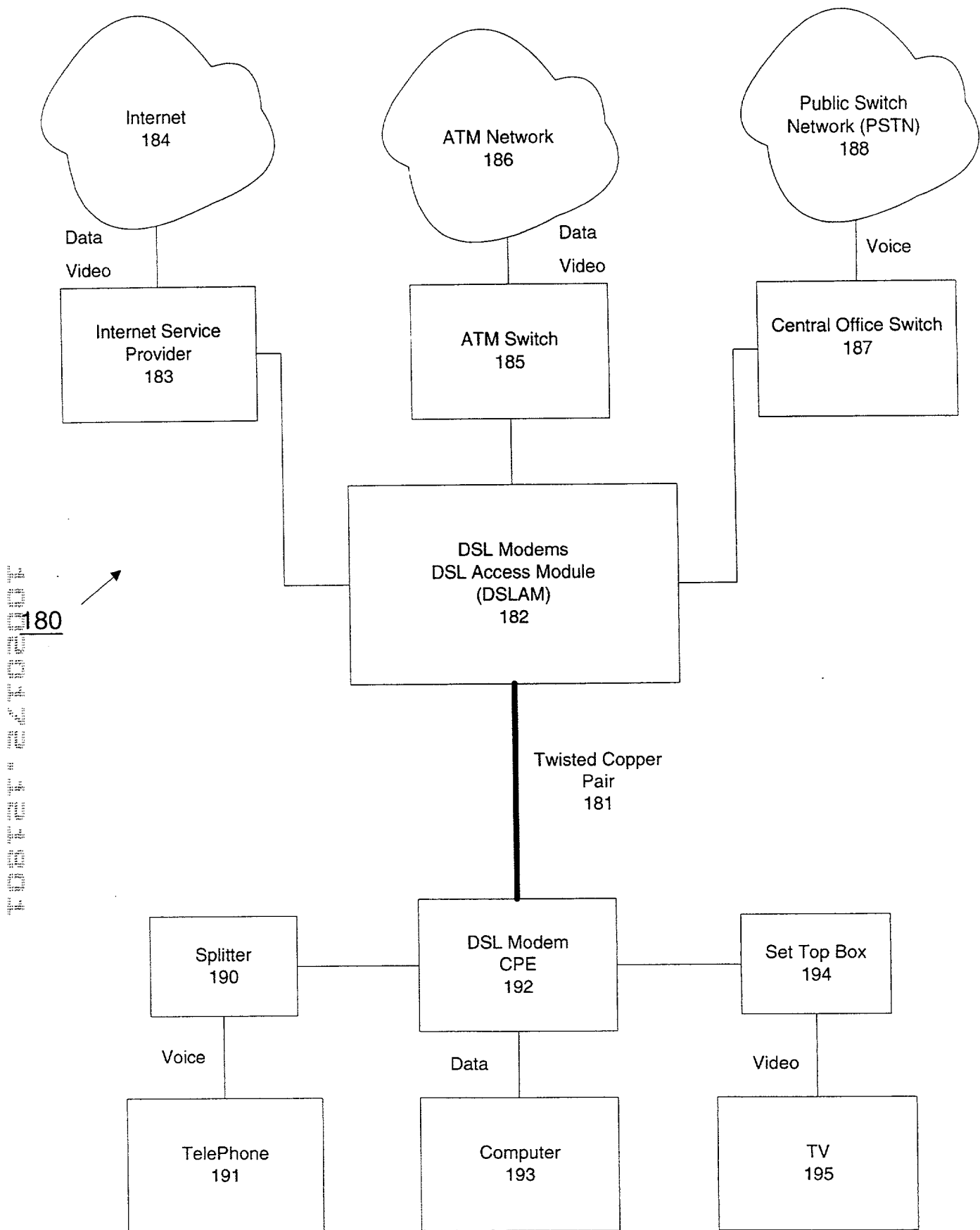


FIG. 1d

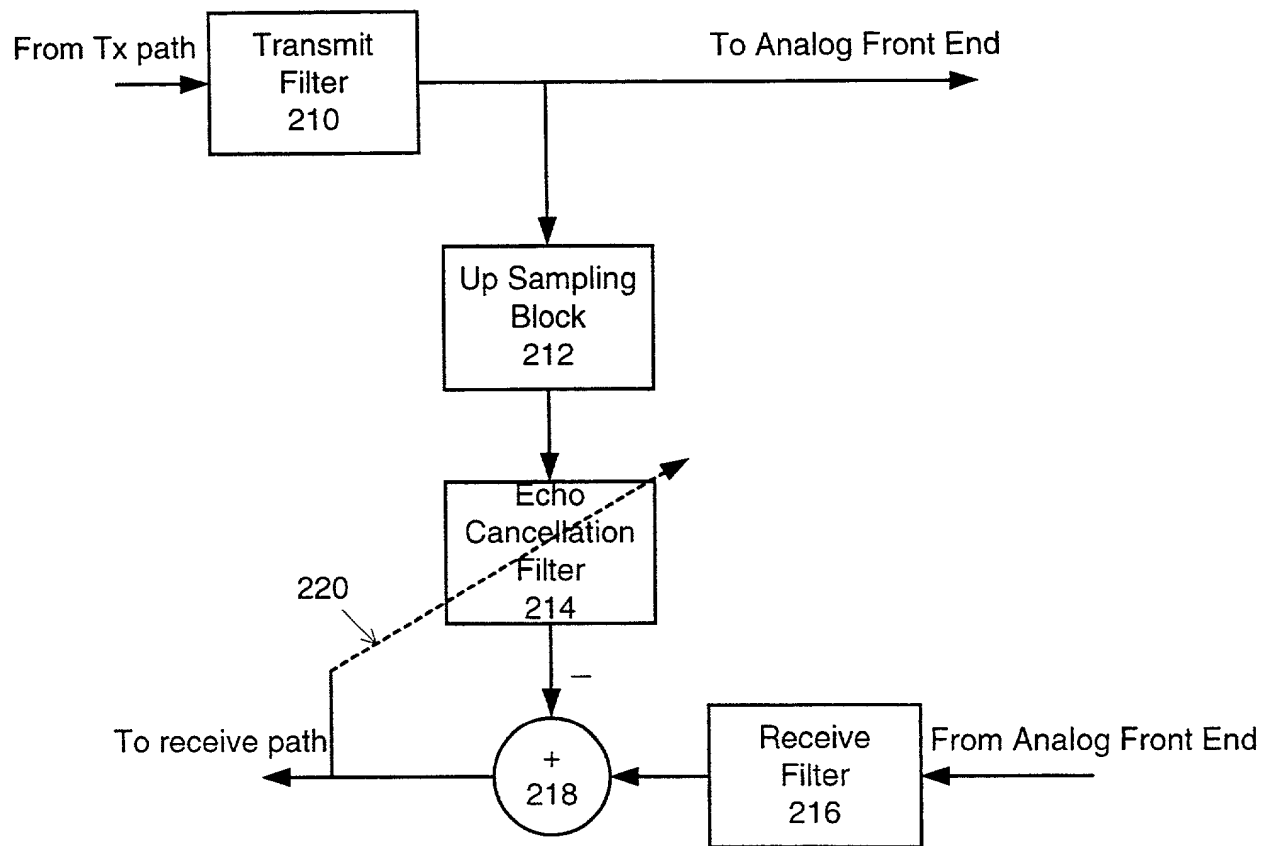


FIG. 2

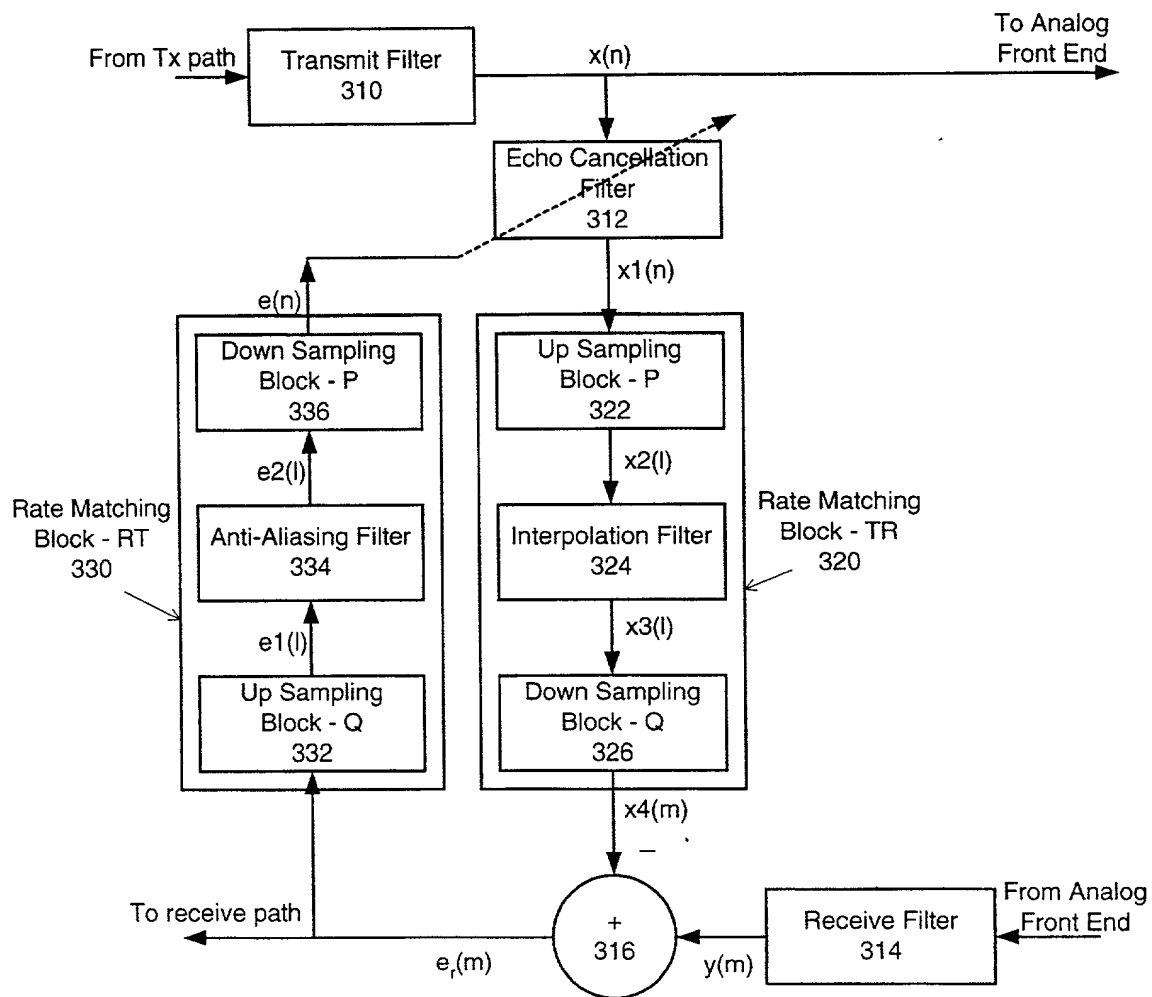


FIG. 3

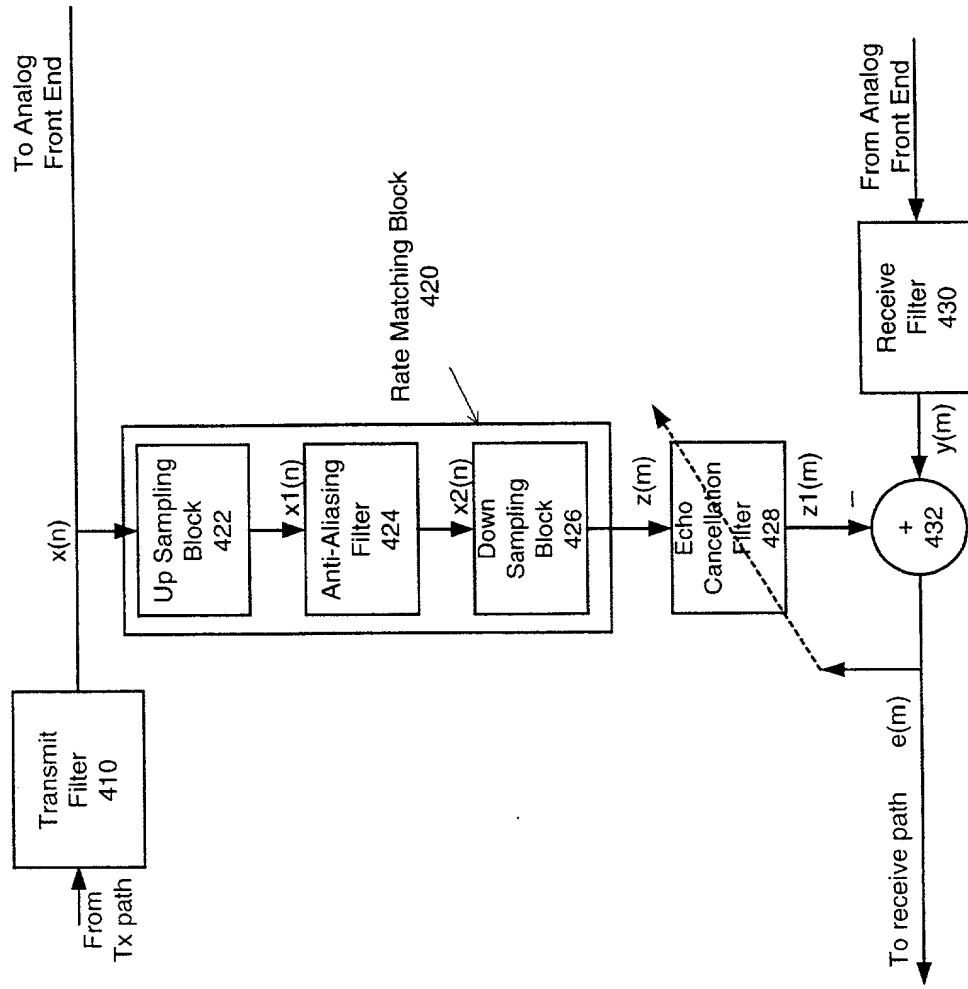


FIG. 4

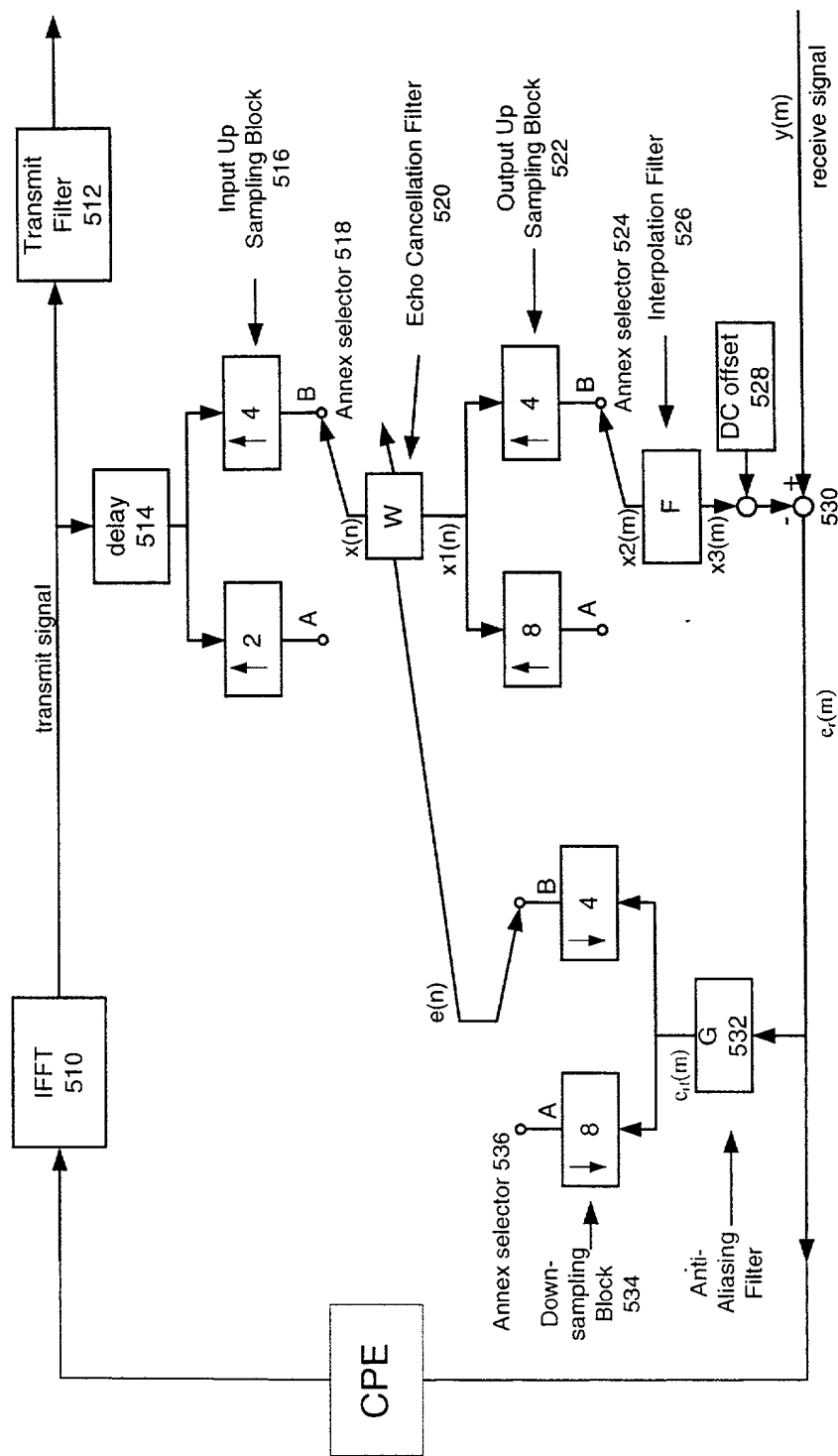


FIG. 5



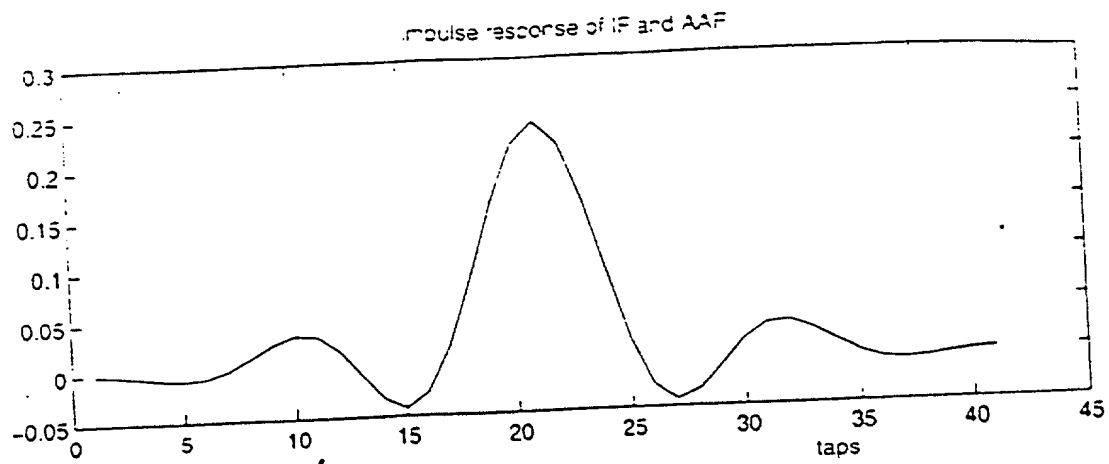


figure 6

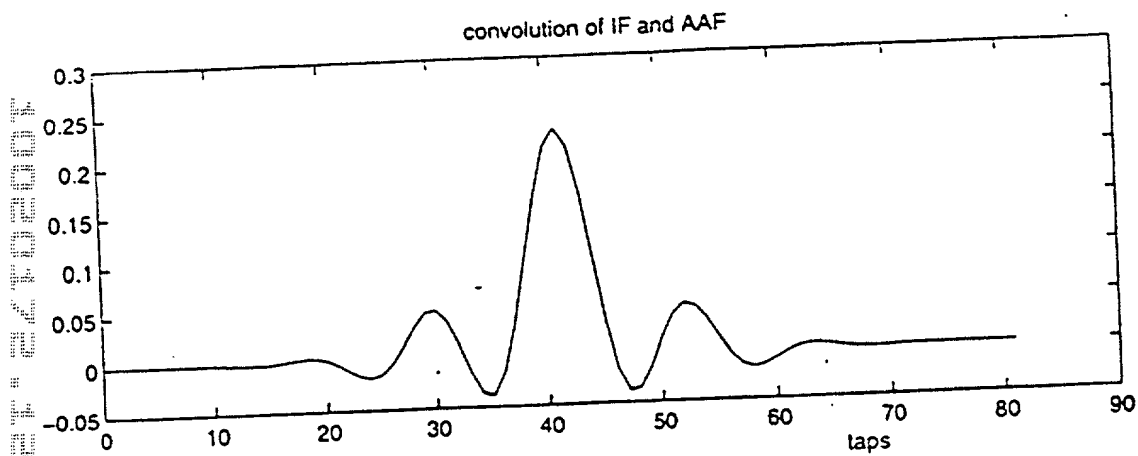


figure 7

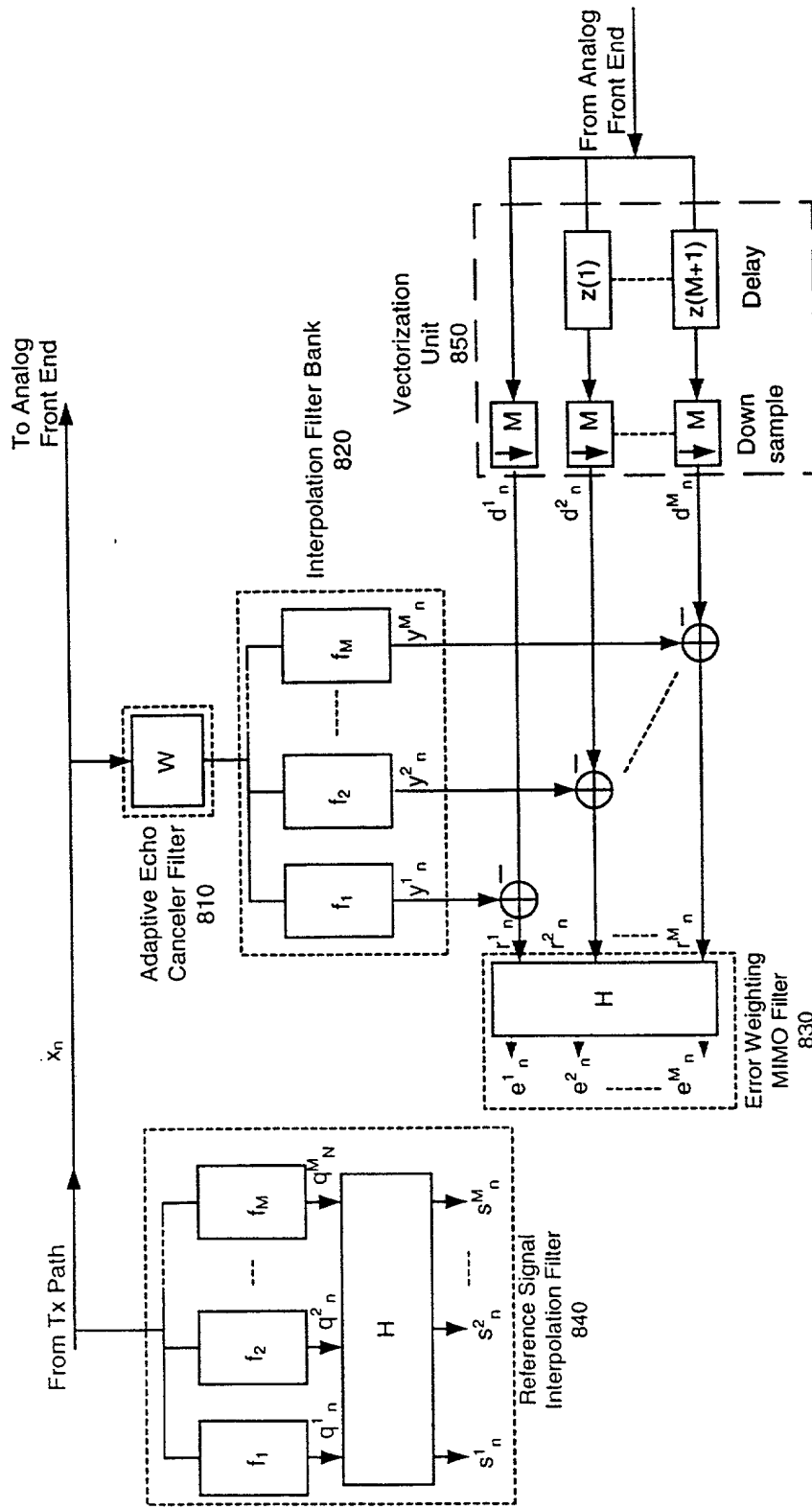


FIG. 8

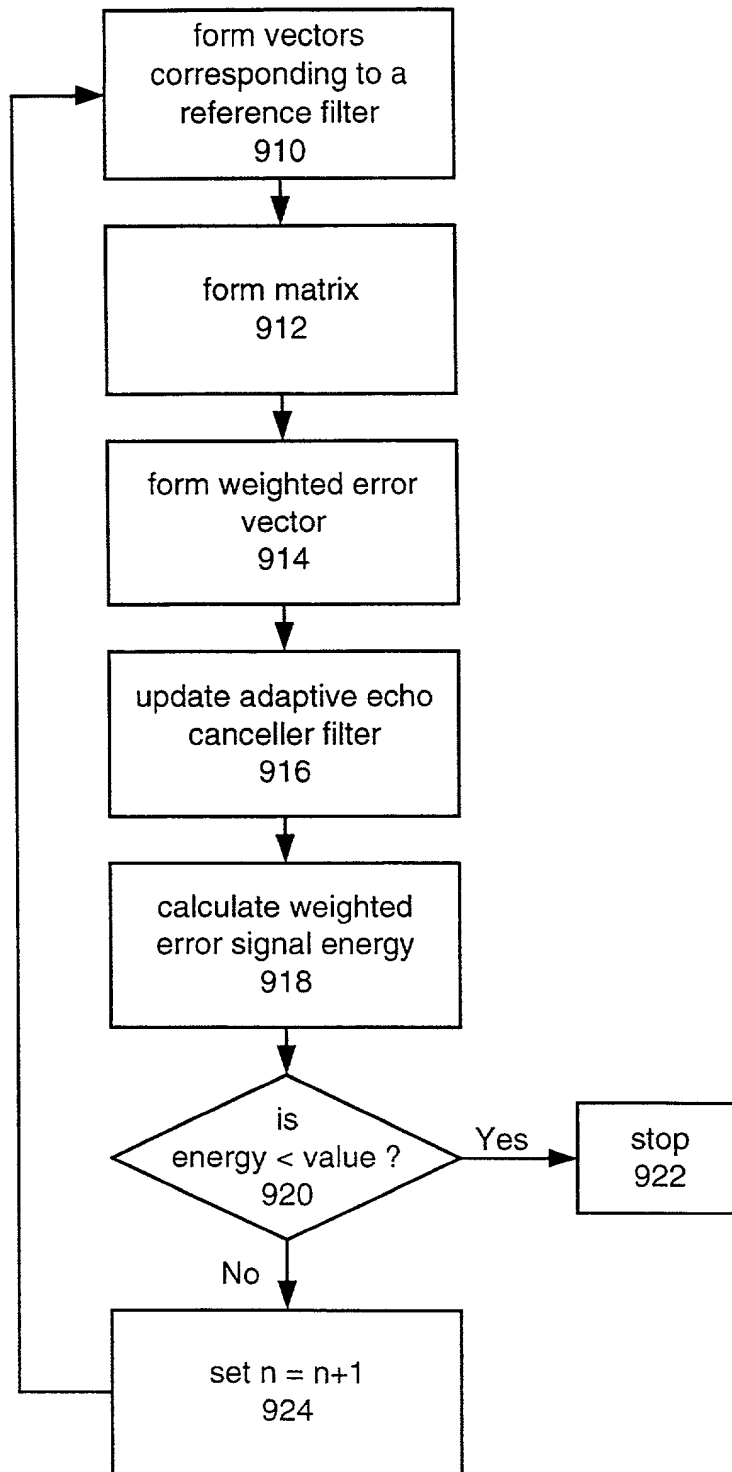


FIG. 9

FIG. 10a

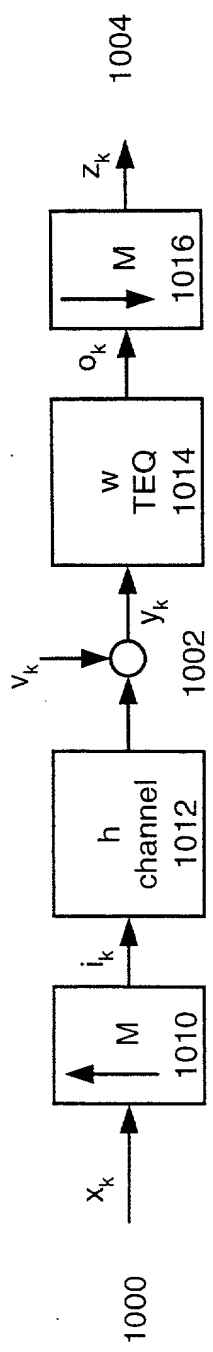


FIG. 10a

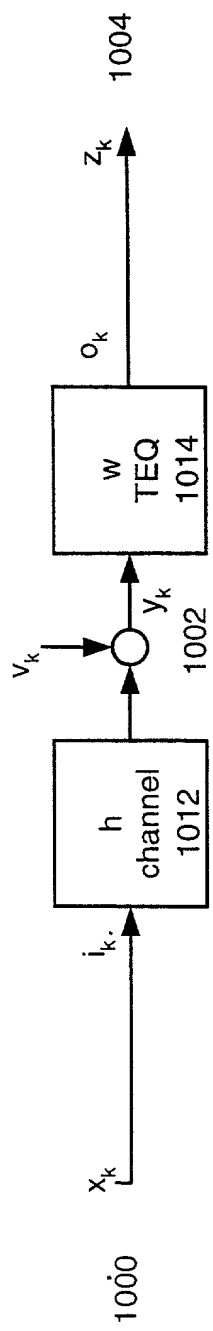


FIG. 10b

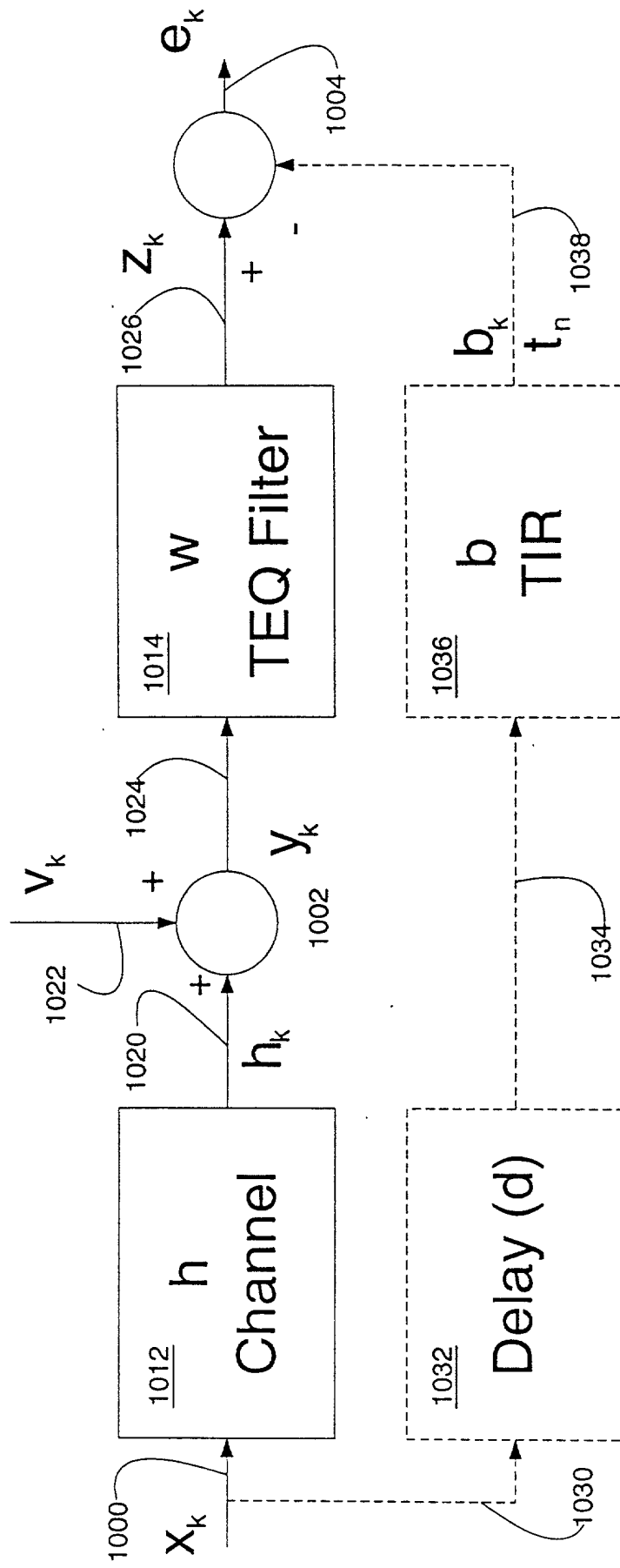


Fig. 10c

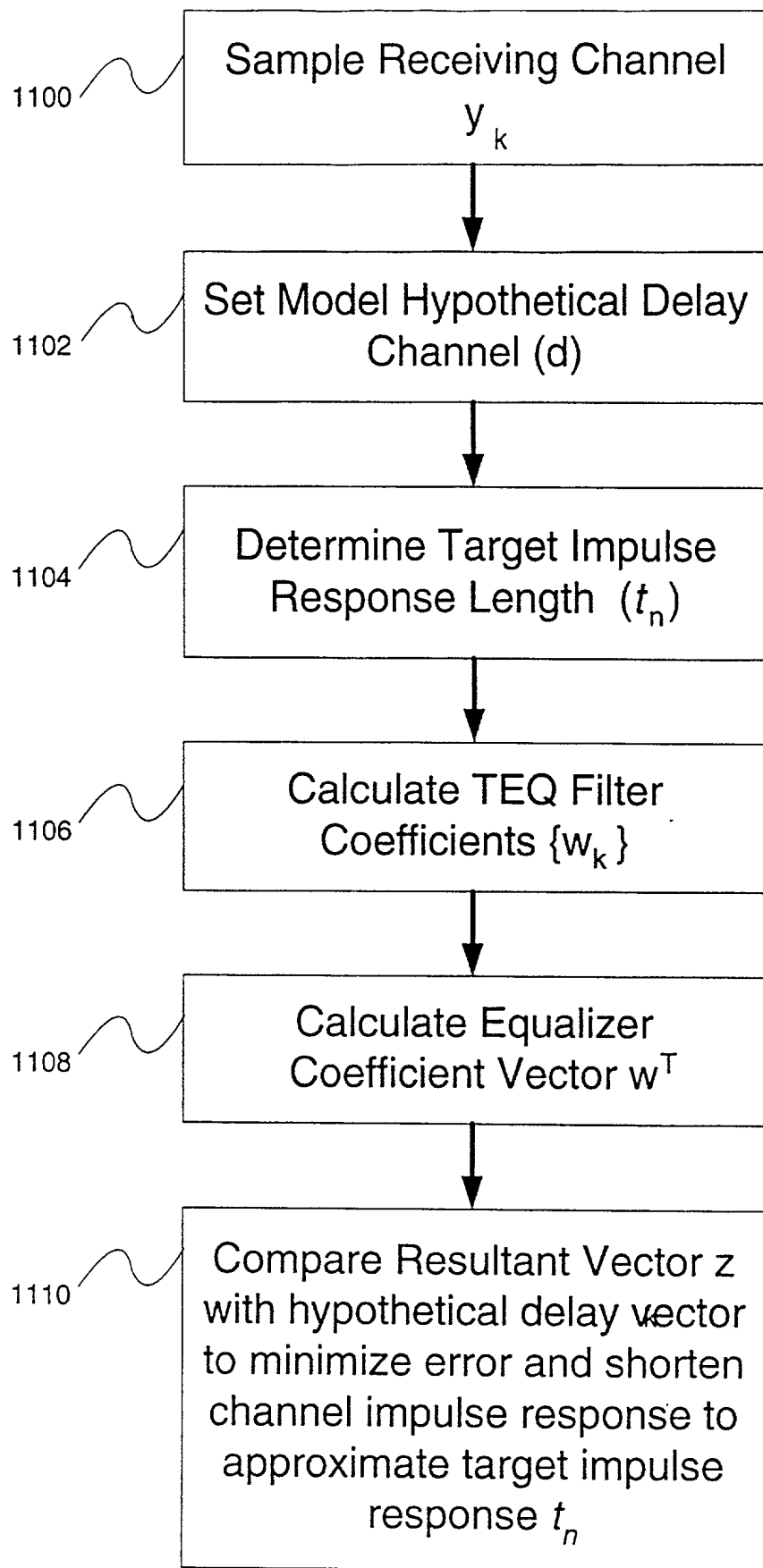


Fig. 11

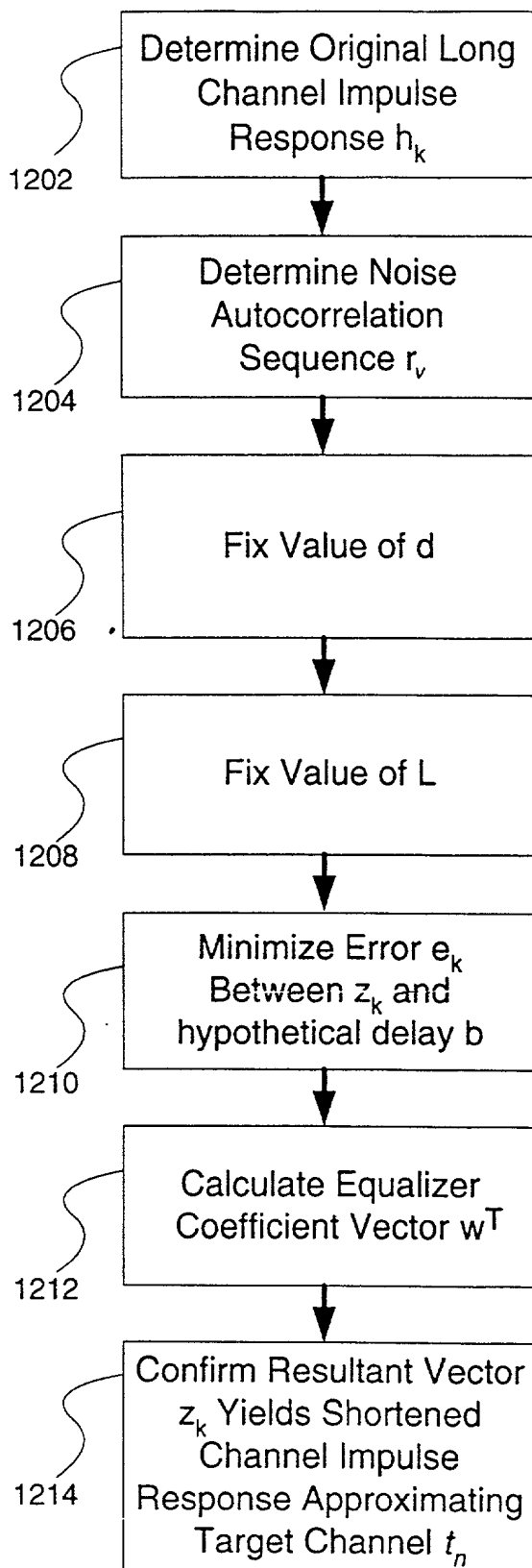


Fig. 12

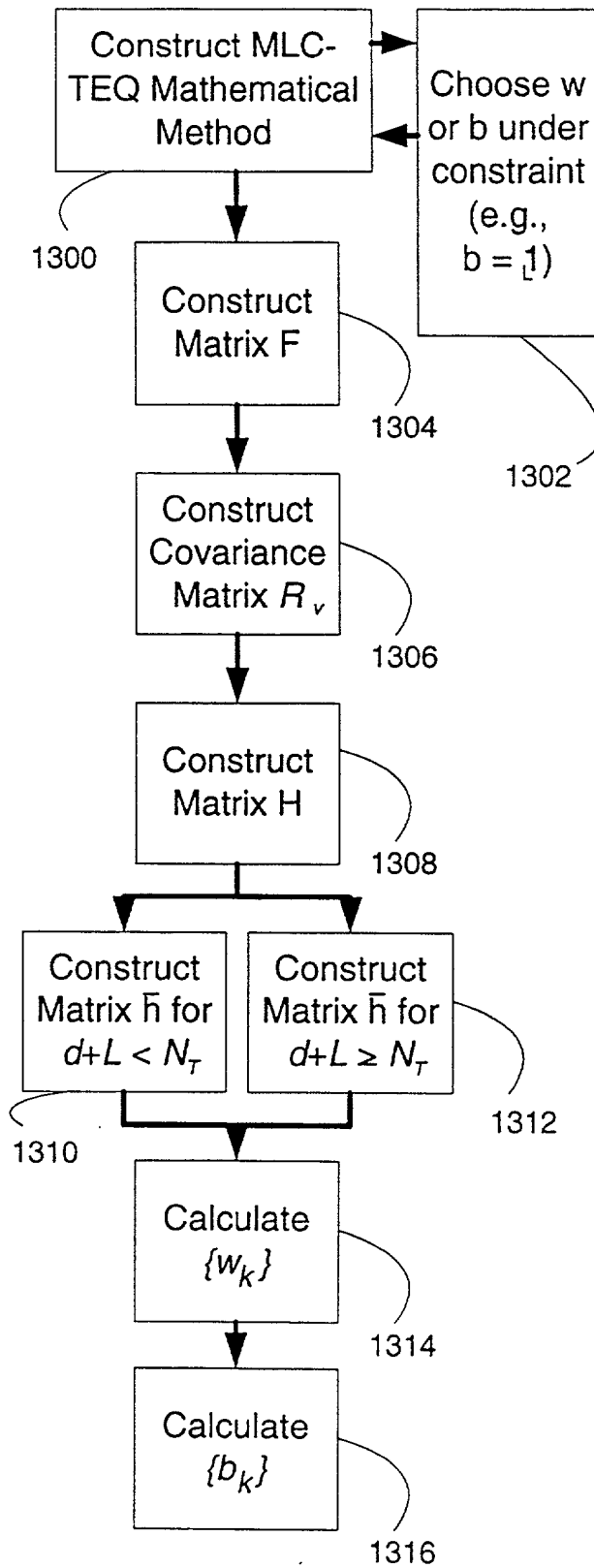


Fig. 13



1400

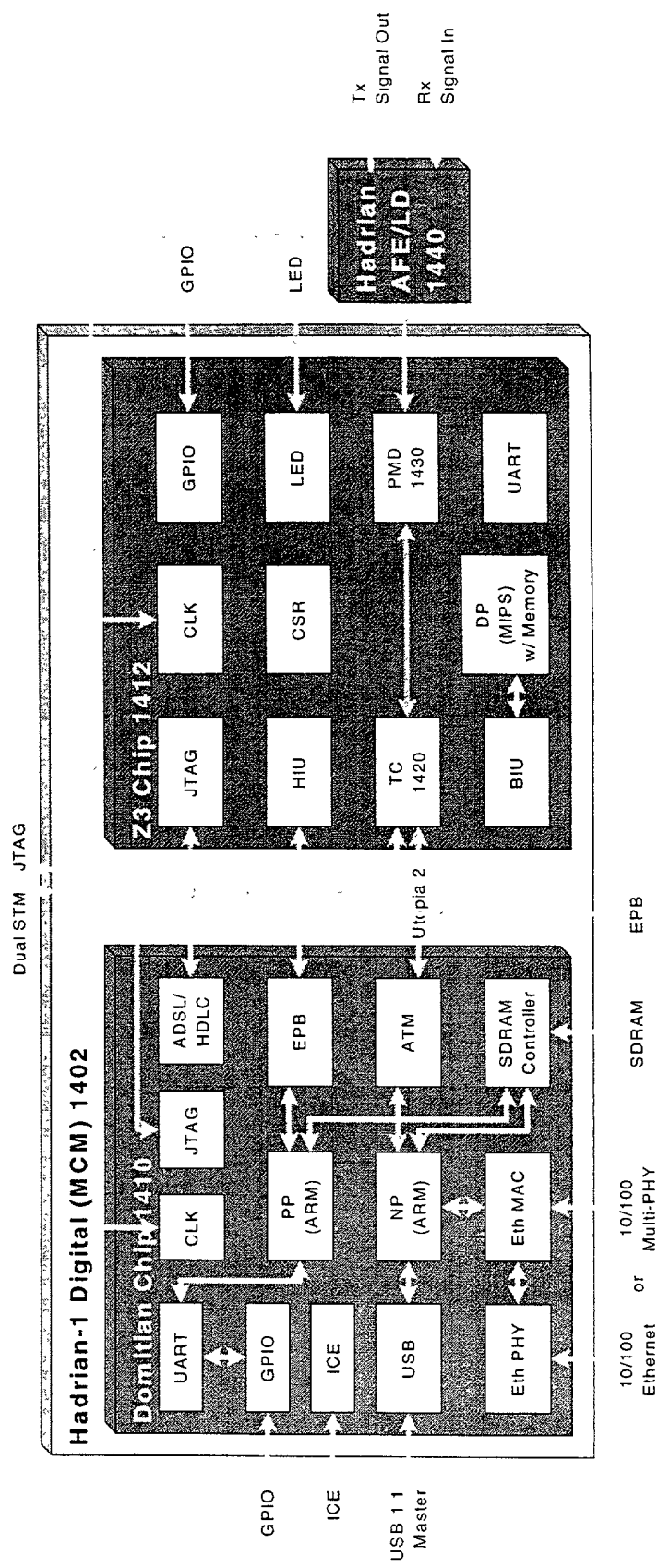
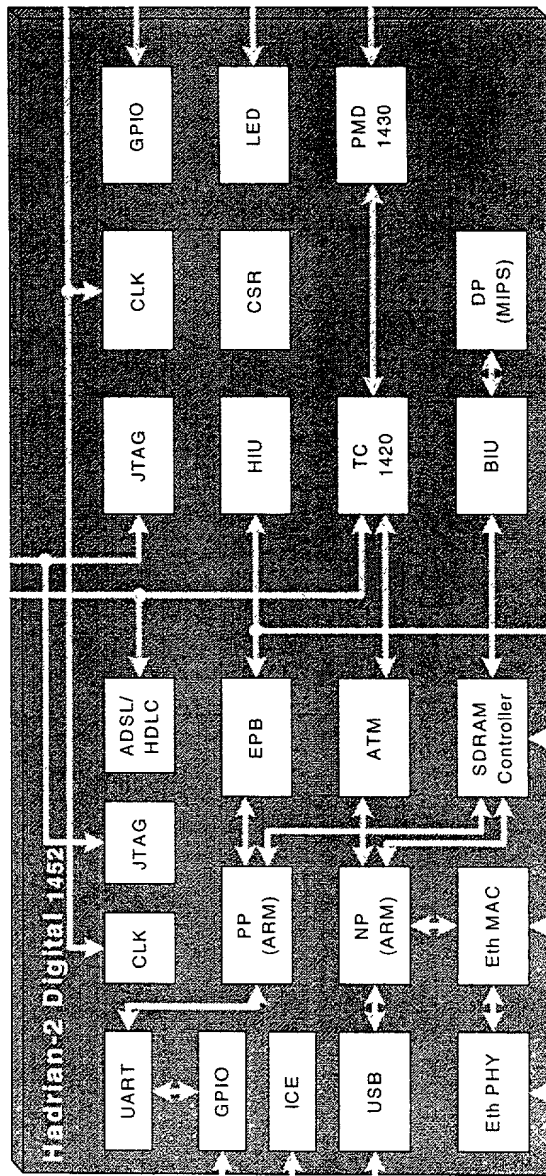


FIG. 14a

Dual STM JTAG



Tx  
Signal Out  
Rx  
Signal In

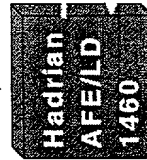


FIG. 14b

1500

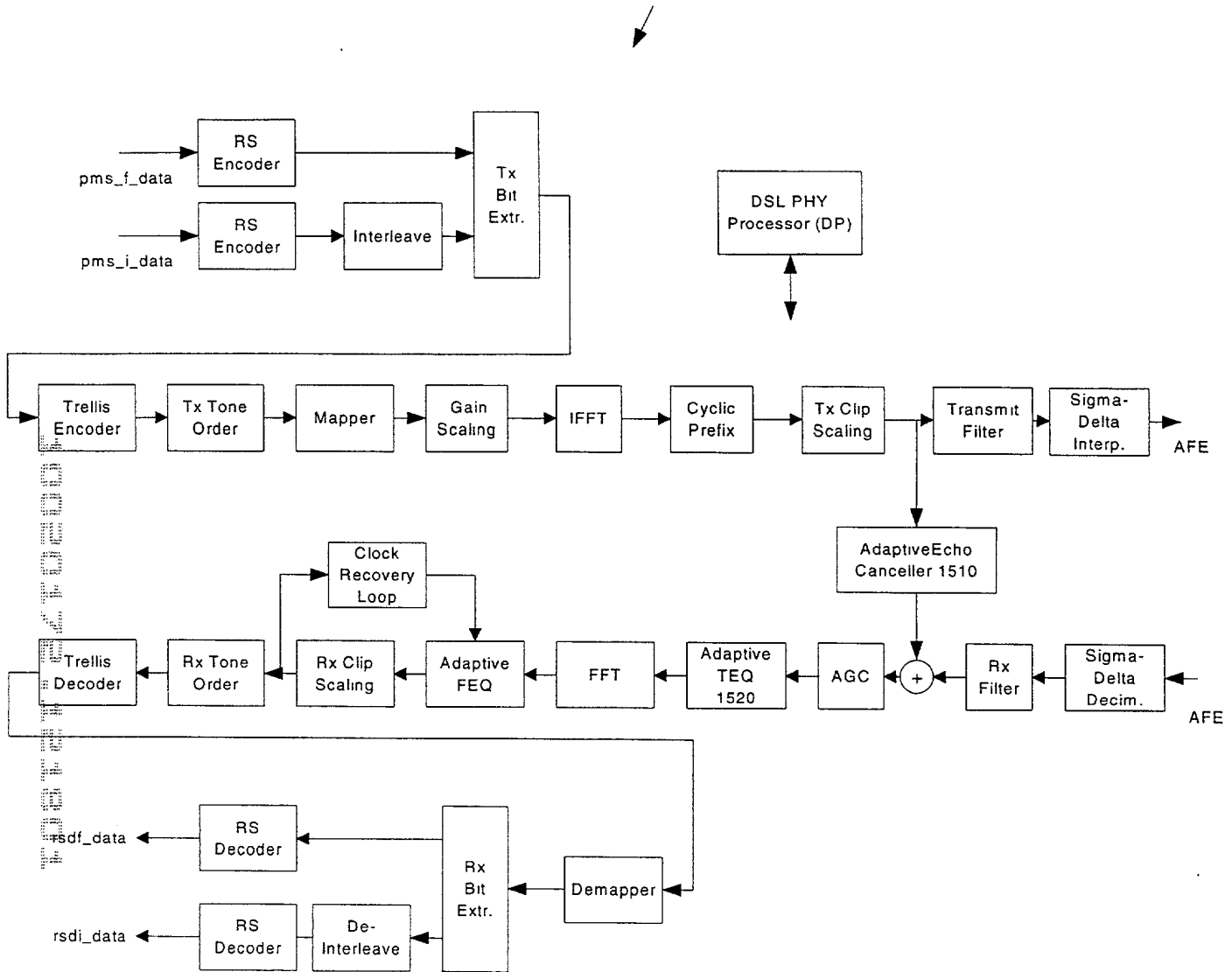


FIG. 15

1600

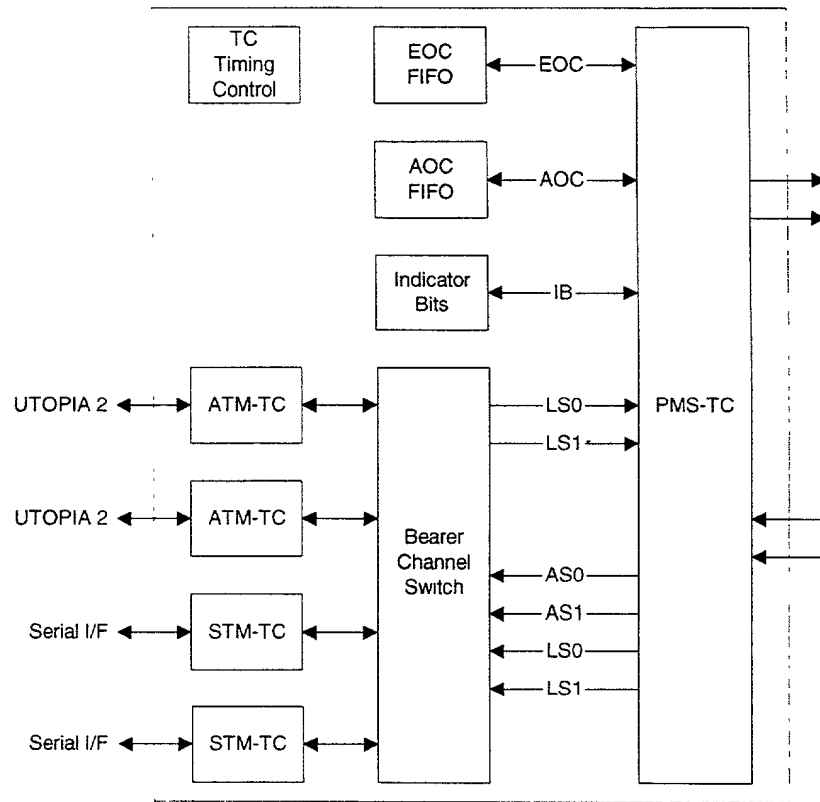


FIG. 16

1700

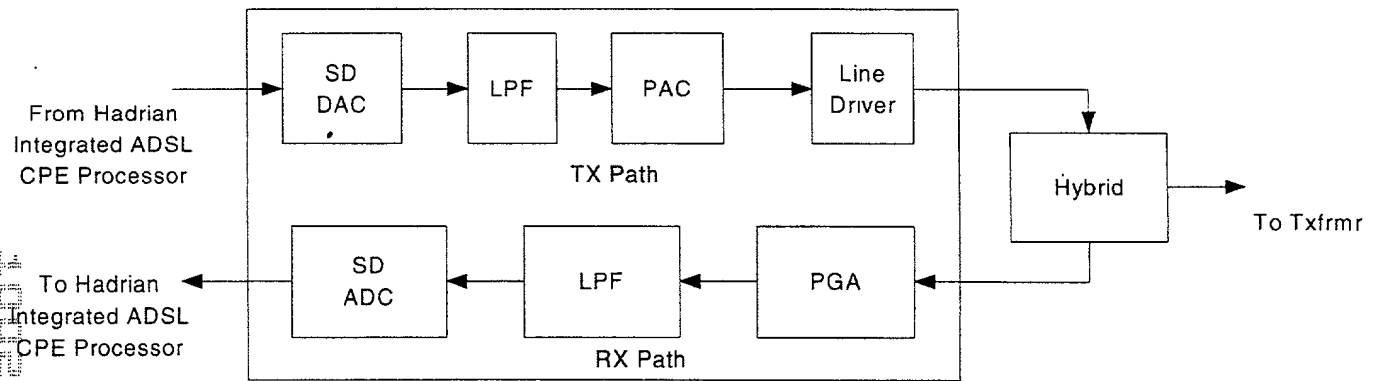


FIG. 17

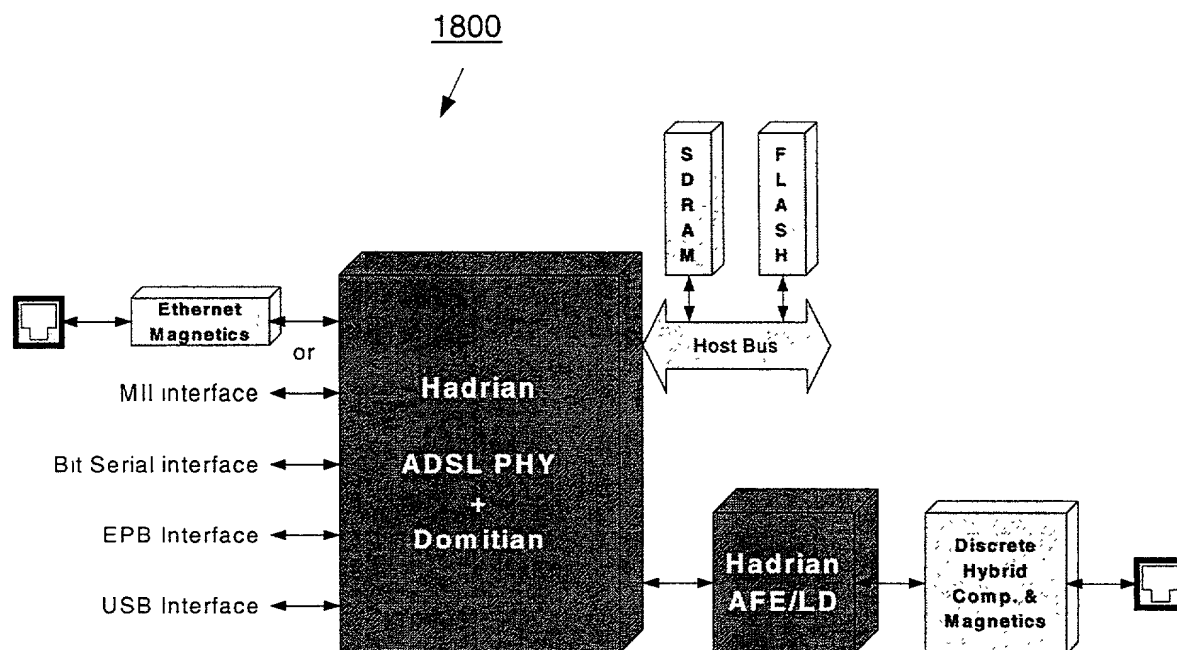


FIG. 18a

1820

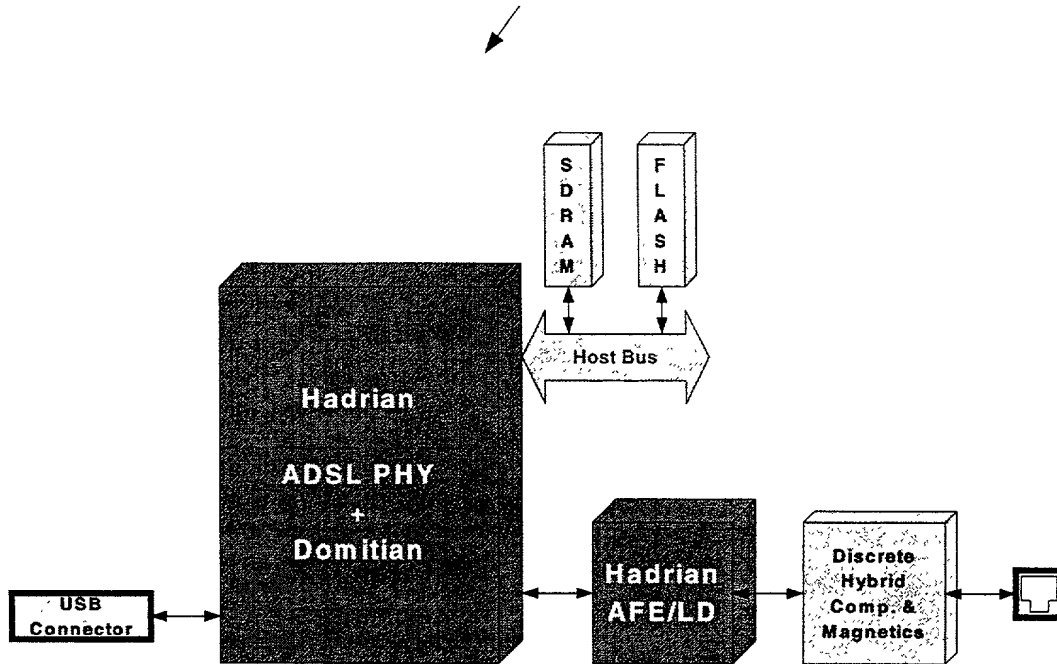


FIG. 18b

1840

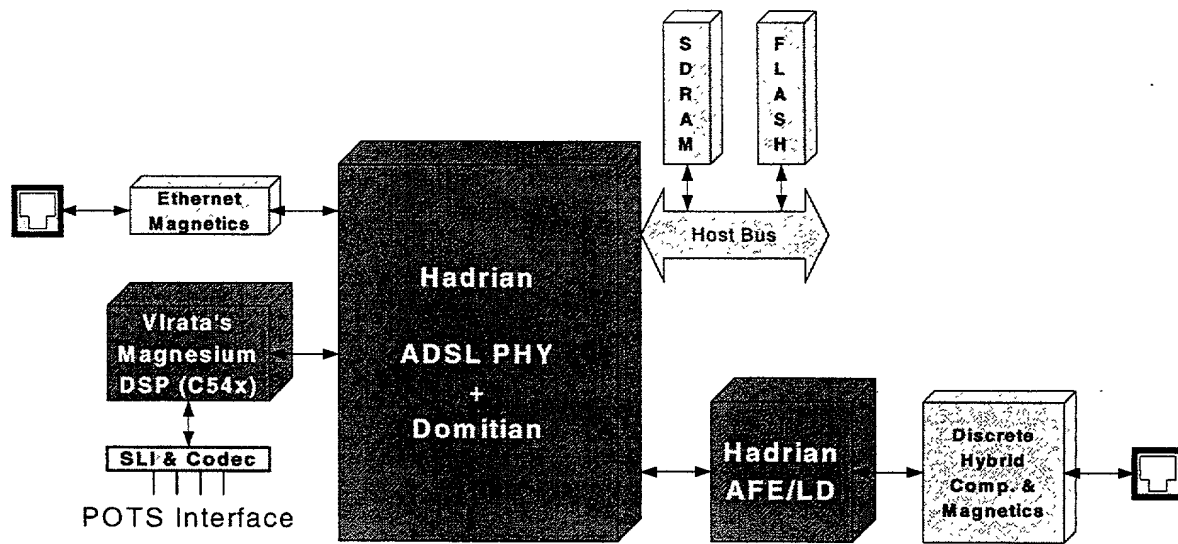


FIG. 18c